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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,881	04/11/2005	Jens Spille	PD020100	9230
24498	7590	12/10/2007		
THOMSON LICENSING LLC			EXAMINER	
Two Independence Way			LEE, PING	
Suite 200				
PRINCETON, NJ 08540			ART UNIT	PAPER NUMBER
			2615	
			MAIL DATE	DELIVERY MODE
			12/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,881	Applicant(s) SPILLE ET AL.	
	Examiner Ping Lee	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16,17,19-23 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16,17,19-23,25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 16, 17, 19-23 and 25-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The newly amended claims 16, 22, 28 and 29 specify "a second field a value is assigned which specifies the decorrelation strength of the specified decorrelation". The specification and the drawings as originally filed fail to clearly and explicitly support the amendment. Table 4 illustrates that a field "diffuseSelect" and an another field "decorStrength". However, the relationship between the twos fields have not been clearly defined. That is, the field "decorStrength", as indicated in Table 4, could define the strength of a signal, but it is not limited to the field "diffuseSelect". Also, it is unclear which field in Table 4 corresponding to the claimed "specified decorrelation". From lines 11-24 of p. 4 of the specification, the decorrelation strength DES has been disclosed. Again, the relationship between the decorrelation strength DES and diffuseness algorithm has not been clearly defined. Furth more, the terms "decorrelation" and "diffuse" are not synonym. Therefore, one skilled in the art could not be reasonably

assumed that the newly added claimed limitation "the specified decorrelation" is the diffuse algorithm. In view of these, the newly amended claims introduce new matter.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 16, 17, 18-23 and 25-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "said non-point sound sources" in lines 14-15.

There is insufficient antecedent basis for this limitation in the claim. Claims 22 28 and 29 have similar defect.

Claim Rejections - 35 USC § 102

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 16, 17, 19-23 and 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Potard et al (hereafter Potard) ("Using XML Schemas to Create and Encode Interactive 3-D Audio Scenes for Multimedia and Virtual Reality Applications").

In view of 112, 1st paragraph rejection above, the claims have been rejected under the broadest interpretation.

Regarding claims 16, 21, 27 and 28, Potard discloses a method a corresponding apparatus for coding a presentation description of audio signals and, comprising:

generating a parametric description of a non-point sound source (sect. 3.3.1., the original source is "dry"), said parametric description including fields specifying decorrelation information, wherein

to a first field, a value is assigned which specifies one of several decorrelations to be applied to said non-point sound source, whereby in case of the usage of the same audio signal for more than one non-point sound source (for example, in a choir), for each of non-point sound sources (singer in a choir), a different value is assigned to apply different decorrelations to each of the non-point sound sources (sect. 2.3.1, for example, particular directivity or a reflecting/absorbing surface representing the singer's body); and

wherein to a second field a value is assigned which specifies the decorrelation strength to be applied to the non-point sound source (sect. 2.3.1, for example pitch transformation); and

linking the parametric description of said non-point sound source with the audio signal of said non-point sound source (see Fig. 6 illustrating an example).

Regarding claims 17 and 23, Potard illustrates in Fig. 5 that separate sound sources are coded as separate audio objects. Fig. 7 is another illustration. Fig. 1 shows the first node defining an object (choir object) and the second node defining the wideness (how many children) and presentation of said non-point sound source by multiple decorrelated point sound sources (by reflective surface and pitch transformation).

Regarding claims 19, 20, 25 and 26, Potard discloses that the size and the defined shape are given by an opening angle having a vertical and a horizontal component (sect. 2.5).

Regarding claims 22 and 29, Potard further illustrates in Figs. 6 and 7 how to decode a presentation description. The steps of evaluating at least of said fields specifying said decorrelation information included in the parametric description of said non-point sound source and the step of selecting, depending on a value assigned to a field in said parametric description, one of the following: one of several decorrelation to the audio signal of said non-point sound source, the strength of the decorrelation of the selected decorrelation read on Table 1 and sect. 3.1 in which the use is allow to modify the scene. The scene, as understood by Potard's disclosure, is defined by many factors, including and not limiting to the decorrelations to non-point sound source and the strength of the decorrelation.

Response to Arguments

7. Applicant's arguments filed 9/28/07 have been fully considered but they are not persuasive.

In response to applicant's argument that Table 4 in the specification supported to amendment, examiner disagreed. As discussed above, the relationship between the second field and the first field has not been clearly and explicitly limited to the relationship as defined in the newly amended claims. Potard discloses how to use different fields to define each sound source. For example, Table 1 lists several common

fields. Each macro-object is composed of many sound sources repeated several times. Without decorrelation, all sound sources of a macro-object will sound the same. In order to create distinction among them, Potard discloses that several fields have been defined for each source in a macro-object, such as directivity, the reflecting/absorbing surface of the sound source and pitch transformation. These read on the claimed fields.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

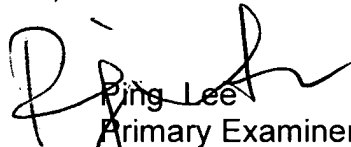
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522. The examiner can normally be reached on Monday, Wednesday and Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ping Lee
Primary Examiner
Art Unit 2615

pwl